

NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

CONSERVATION COVER

(acre)
CODE 327

DEFINITION

Establishing and maintaining permanent vegetative cover to protect soil and water resources.

PURPOSE

- Reduce soil erosion and sedimentation.
- Improve water quality.
- Enhance wildlife habitat.

CONDITIONS WHERE PRACTICE APPLIES

This practice is applicable on land retired from agricultural production. *This includes, but is not limited to, land entered into retirement conservation programs such as Conservation Reserve Program.*

This practice does not apply to plantings for forage production or to critical area plantings.

CRITERIA

General Criteria Applicable to All Purposes

The species to be planted will be adapted to soil, range site, and climate conditions.

The species to be planted shall be suitable for the planned purpose and site conditions. Invasive species shall be avoided.

Planting dates, planting methods and care in handling and planting of the seed or planting stock shall ensure that planted

materials have an acceptable rate of survival.

Acceptable methods of establishing the vegetation are: seeding, sprigging, planting trees and shrubs, or natural regeneration.

Only viable, high quality, and adapted seeds, cuttings, or seedlings shall be used.

Legume seed shall be inoculated with the proper Rhizobia bacteria before planting.

Site preparation shall be sufficient for establishment and growth of selected species.

Timing and use of equipment shall be appropriate for the site and soil conditions.

Vegetative manipulation will be accomplished by mechanical, biological or chemical methods, by prescribed burning, or a combination of the four. If burning is used alone or in combination with the other methods, **Prescribed Burning** (Code 338) must be included as a planned practice.

All nutrients shall be applied following the practice **Nutrient Management** (590) in the Field Office Technical Guide (FOTG).

The minimum amount of vegetative (ground) cover which must be established and maintained in order to meet any and all purposes, is that amount necessary to keep soil loss at or below "T." The Revised Universal Soil Loss Equation (RUSLE) will be used to calculate the amount of sheet

and rill erosion on the landscape profile before and after practice establishment.

Vegetative (ground) cover will be determined by using one of the following two methods:

- Line transect (beaded string from the Crop Residue Management Kit) or equivalent, or
- Pace transect (walking and counting the hits on a mark of your shoe).

Additional Criteria for Improving Water Quality

Appropriate conservation buffers will be installed adjacent to sensitive water bodies.

A suitable seedbed will be prepared on road surfaces and other infrastructure that are taken out of service, especially where it is a known source of sediment.

Additional Criteria for Enhancing Wildlife Habitat

Planting/Establishment

The vegetative cover selected will meet the habitat requirements of the target wildlife species. An appropriate mixture of plants will be planted to encourage maximum plant diversity. Monoculture plantings are highly discouraged.

The long-term land use objectives and habitat needs of target wildlife species will be considered in the selection and management of the vegetative cover.

Management/Maintenance

Methods used shall be designed to protect the soil resource from erosion.

If trees and shrubs are to be used for wildlife, the mature canopy will not cause the soil loss rate to exceed "T."

Maintenance practices and activities shall not disturb cover during the reproductive period for grassland wildlife species.

Maintenance measures must be adequate to control noxious weeds and other invasive species.

To benefit insect food sources for grassland nesting birds, spraying or other control of noxious weeds shall be done on a "spot" basis to protect forbs and legumes that benefit native pollinators and other wildlife.

CONSIDERATIONS

This practice may be used to promote the conservation of wildlife species in general, including threatened, endangered, and native species.

Where applicable this practice may be used to conserve and stabilize archeological and historic sites.

Consider rotating management and maintenance activities (e.g. mow only one-fourth or one-third of the area each year) throughout the managed area to maximize spatial and temporal diversity.

Where wildlife management is an objective, the food and cover value of the planting can be enhanced by using a habitat evaluation procedure to aid in selecting plant species and providing or managing for other habitat requirements necessary to achieve the objective. The conservation practice specifications for **Wetland Wildlife Habitat Management** (Code 644) and **Upland Wildlife Habitat Management** (Code 645) contain information about food and cover requirements for various wildlife species.

Use native species when available. Consider trying to re-establish the native plant community for the site.

If naturalized cover establishes, and this cover meets the intended purpose and the

landowner's objectives, the cover should be considered adequate.

Some of the species that naturally regenerate in an area can be very aggressive and prolific and may present a hazard to proximal native areas. See the reference by Cuddihy and Stone for detailed information. Inform the producer if the species are within the area and encourage control of the plant.

If any plants included in the State of Hawaii Noxious Weed List are present, consider eliminating or controlling them by the most appropriate means. Control noxious weeds with methods approved by the Cooperative Extension Service (CES), or other qualified personnel. If applying pesticides, comply with the practice **Pest Management** (Code 595).

Consider the effects of salt spray, pH, soil texture, soil fertility, noxious weeds and compaction on plant growth.

Consider creating a corridor of vegetation suitable for wildlife, if the field can be connected to a nearby wildlife area.

Practice Effects

Soil

Increased vegetative cover will decrease the sheet and rill erosion hazard. Low levels of concentrated flow can be controlled, if the proper vegetation at time of planting is selected.

Water

Surface water quality will increase due to the decrease of soil erosion and sedimentation.

Air

Reduction of fugitive dust hazards within the treated area.

Plants

Increase in plant biodiversity will be achieved with proper species selection.

Animals

Establishment of most types of vegetative cover will attract wildlife to the area.

Refer to Section V of the Field Office Technical Guide for additional information.

PLANS AND SPECIFICATIONS

Site-specific specifications which document the requirements for installing, operating and maintaining this practice on a particular site to achieve its intended purpose shall be prepared in accordance with this standard and the practice specification.

The site-specific specifications shall be documented on the NRCS Hawaii Jobsheet for this practice and given to the client. Other documents such as practice worksheets, maps, drawings, and narrative statements in the conservation plan may be used to plan or design the practice and to prepare the site-specific specifications.

The site-specific specifications shall document the following, as a minimum: selected species, planting rates and dates, establishment methods and procedures, and other management actions need to assure an adequate stand.

OPERATION AND MAINTENANCE

Maintenance practices and activities should not disturb cover during the primary nesting period for grassland species in each state. Exceptions should be considered for periodic burning or mowing when necessary to maintain the health of the plant community. Mowing may be needed during the establishment period to reduce competition from annual weeds. Noxious weeds will be controlled to prevent proliferation and spreading to adjacent fields.

Annual mowing of the conservation cover stand for general weed control is not recommended.

Any use of fertilizers, pesticides and other chemical shall not compromise the intended purpose.

REFERENCES

Cuddihy, L. W., Stone, C. P. 1990.
Alteration of Native Hawaiian Vegetation.
University of Hawaii Cooperative National
Park Resources Studies Unit.